



U.S. Army Research, Development & Engineering Command



01 June 2005

Technology to the Warfighter
Global



U.S. Army Research, Development & Engineering Command

Mission: Get the right integrated technologies into the hands of warfighters quicker.



**Strike
(Exploit FCS Netted
Fires)**



**Human
Performance &
Embedded
Training**



**Sensory
Enhancement**

**RDECOM
Operates
World-
wide**

- ★ **Over 300 International Agreements**
- ★ **Linkage to Combatant Commanders - FAST**
- ★ **Teams**
- Engineer and Scientist Exchange Program**

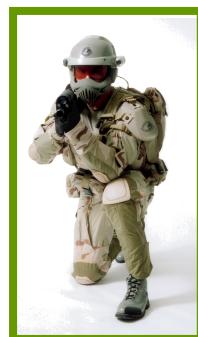
Technology to the Warfighter
Squad



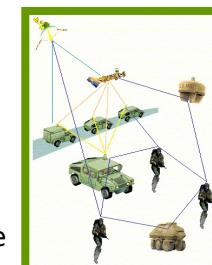
**Battery Charging
Fuel Cell with
Methanol Steam
Reforming Unit**



Robotics Interface



**Future Force
Warrior**



**Collaborative Networked
Situational Understanding**



**Protective Mask
& JLIST - Joint Service
Lightweight
Integrated Suit
Technology**



Linkage to Combatant Commands (FAST)

EUROPEAN DIVISION



USAREUR
Heidelberg, GE



7th ATC
Grafenwöhr, GE



V Corps
Heidelberg, GE



EUCOM
Stuttgart, GE



SETAF (A)
Vicenza, IT



EUSA/USFK
Seoul, KOR



USARPAC
Ft. Shafter, HI

PACIFIC DIVISION



ALCOM/USARAK
Ft. Richardson, AK



USARPAC
Ft. Shafter, HI



NTC
Ft. Irwin, CA



III Corps
Ft. Hood, TX

CENTRAL DIVISION



I Corps
Ft. Lewis, WA



**9 FAST/RDECOM
Teams to
Kuwait/Iraq/Afghanistan**



SOUTHCOM
Miami, FL



JFCOM
Norfolk, VA



XVIII Abn Corps
Ft. Bragg, NC



FORSCOM
Ft. McPherson, GA



SOCOM
MacDILL AFB, FL



CENTCOM
MacDILL AFB, FL

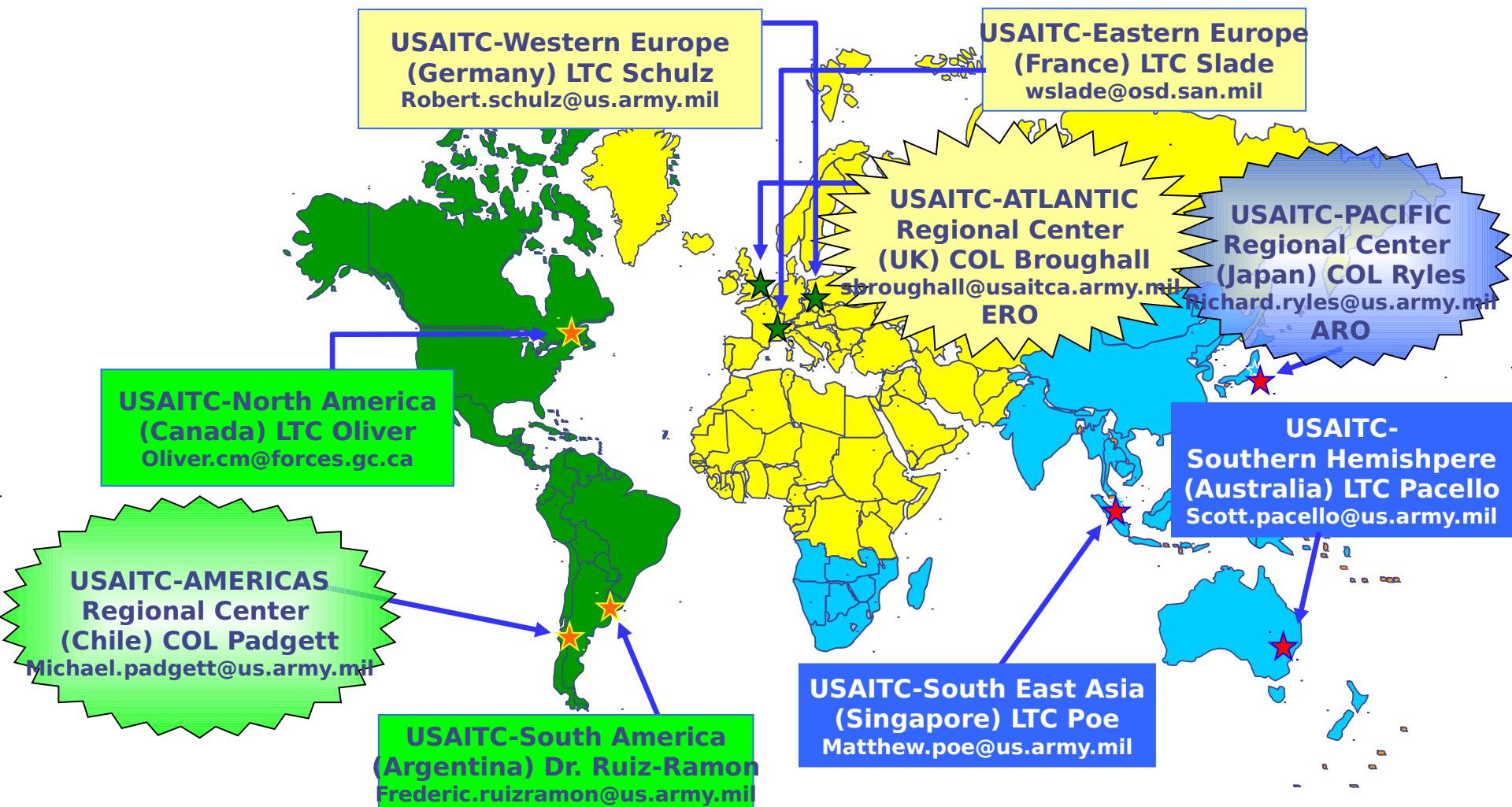




Linkage to International

Markets

International Technology Centers: Identifying S&T solutions worldwide.



Technology Information Papers are submitted on areas of interest to the Army from various foreign government, industry and academia.

Support to Current Operations

HMMW
V
Doors



Armed Unmanned Weapon Platforms



Pacbot



Tear-off
Windshie
ld
Film



Shelf-Stable
Pocket Sandwich



Omni-Directional
Inspection System



Cooperative
Defense Initiative



Bunker Defeat Munition

40mm
Thermobaric
Cartridge



Zinc-Air Battery



Slat
(Bar)
Armor



Phaselator



Aerial
Delivery

Mobile Lab



Field Expedient Protection
for Ground Vehicles

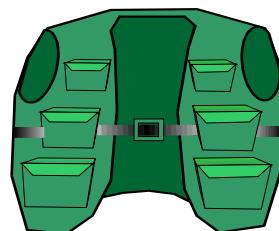


Interceptor Body Armor
& Advanced Combat Helmet:
Dozens of Lives Saved
During OEF/OIF





The Future



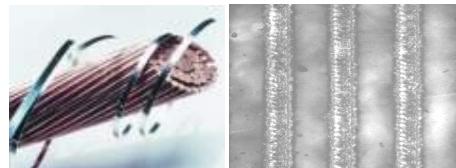
Body-
Conformabl
e Power



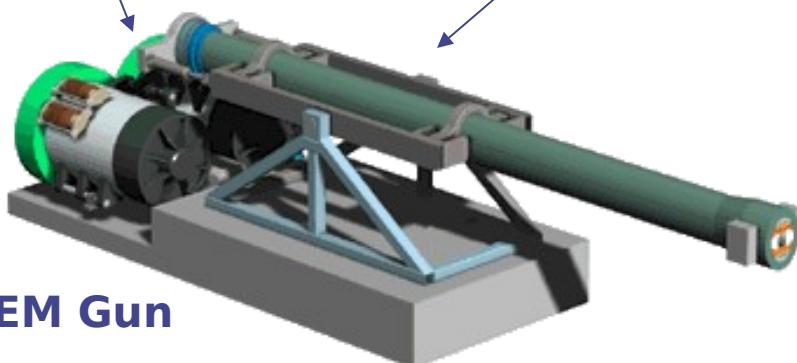
Fuel Cell APU



Cryocoolers



High Temp Silicon



EM Gun



Future
Force
Warrior



Battery Chargers



Hybrid

In-Hub Motor



Gas to Liquid

The Environment - "The Perfect Storm"

Army Strength
30,000 to 100,000 additional troops

BRAC

GWOT
One month OPTEMPO = one year design life

Resources
Supplementals ?
Return to Core Budget

Modularity
Increase from 33 to 43 (?) UAs

Transformation
(Modernization)

QDR
Gain/Divest Missions

S&T ?





Partnering

- **Department of Energy Labs**
 - **Member of Board of Directors**
 - **Member of Technology and Capability IPTs**
- **Other Service Labs**
 - **Naval Research Lab**
 - **Air Force Research Lab**
- **Academia**
 - **~ 300 academic partners in 50 states**
 - **University Affiliated Research Centers**
 - ✓ **Institute for Advanced Technology - University of Texas at Austin**
 - ✓ **Institute for Creative Technology - University of Southern California**
 - ✓ **Institute for Soldier Nanotechnology - Massachusetts Institute of Technology**
 - ✓ **Institute for Collaborative Biotechnology - University of California at Santa Barbara, Massachusetts Institute of Technology, and California Institute of Technology**
 - **Collaborative Technology Alliances**
- **Industry**
 - **Small Business Innovative Research**
 - **Cooperative Research and Development**
 - **Collaborative Technology Alliances**

**“Our ultimate customer is the
Soldier...**

**My son or daughter, your son or
daughter
...who will judge our efforts with
their
lives and their mission
accomplishment.**

This is a sacred trust
Major General (Ret.)
which will not be compromised.”

